Response to Mr. Tip Johnson and Douglas Tolchin

1) Comment noted. Ecology believes that all regulatory laws and statutes are and will continue to be complied with throughout this project. Any specific issues regarding potential noncompliance should be detailed and forwarded to Ecology in order that these issues can be addressed and appropriate actions undertaken to alleviate any ongoing concern.

2) Comment noted. Previous and ongoing evaluations of the environmental protectiveness offered by the list of alternatives shows that effective physical and chemical containment strategies can be employed at waterfront properties. Ongoing containment design in the ***cleanup action plan*** and ***engineering design report*** will more definitively answer specific protectiveness and implementability issues. If selected, the ASB will be designed to ensure protection from foreseeable environmental forces, consistent with current Ecology, EPA, and Corps guidance for confined sediment disposal facilities. In the unlikely event that such protection cannot be achieved with the ASB, another more viable alternative will be selected by Ecology as a contingent remedy.

3) The balance between future site use and environmental risk has been given careful consideration by the federal, state, tribal and local stakeholders involved in the Bellingham Bay Pilot Work Group. Cooperation between all parties and evaluation of these factors led to the alternatives presented in the Bellingham Bay Comprehensive Strategy and the alternatives presented in the Whatcom Waterway Feasibility Study and Supplemental Feasibility Study.

4) Natural Resource Damage Assessment (NRDA) decisions are the authority of the NRDA agencies, including tribes, federal services, and Ecology, among others. The tribes and federal/state NRDA agencies have been involved throughout the Bellingham Bay Project and have been instrumental in shaping the alternatives process.

5) If this alternative is selected, all potential beneficial uses will be reviewed. It should be noted that this property is currently owned by the Georgia-Pacific Corporation.

6) The cost estimates for shipping to landfill facilities were reevaluated and resulted in a 10 percent reduction in tipping fees for disposal of contaminated sediment. The cost of shipping sediment to a landfill is still substantially greater than use of the ASB for sediment disposal. As set forth in MTCA (Chapter 173-340-360[5]), a cleanup action shall not be considered practicable if the incremental cost of the cleanup action is substantial and disproportionate to the incremental degree of protection it would achieve over a lower preference cleanup action. When selecting

from among two or more cleanup action alternatives that provide a sufficient and equivalent level of protection, as defined above, preference may be given to the least cost alternative, subject to an evaluation of public concerns and technical uncertainties.

7) a) Current human health risks have been calculated based on site-specific measured concentrations and exposure pathways. Mass balancing is not necessary to calculate these risks. b) Potential mercury vapor flux estimates developed to date for the site are of a relatively low magnitude, and are not likely to pose a potential human health or environmental concern. However, more detailed mercury vapor flux calculations will be performed during remedial design for the alternative selected in order to verify that site-specific conditions will provide for adequate safety for both human health and the environment. These data will be made available for public review and comment in the design documents. Current G-P upland and groundwater remedial site cleanup monitoring data show that risks to human health due to mercury vapor is far below United States Occupational Health and Safety Guidelines and other relevant risk –based criteria. Site monitoring for mercury vapor will also be included as part of the sediment cleanup monitoring strategy, although compliance results are expected to be similar to those for the upland cleanup areas.

8) Sediment chemical testing included many organic and inorganic compounds. Biological testing was also performed to assess environmental threats posed by these compounds as well as by compounds which may potentially cause deleterious ecological effects through synergistic interactions. Based upon these data, those compounds identified as being of concern to human health and the environment are the focus of the remedial action.

9) If the ASB is selected as part of the preferred cleanup action, detailed engineering analyses will be presented in the ***engineering design report***. The feasibility phase of the process is not designed to address specific design issues; however they will be addressed in subsequent documents regardless of the alternative selected.

10) Comment noted. See response #9 above.

11) Comment noted. See response #3 above.

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Region 4 Office: 16018 Mill Creek Boulevard - Mill Creek, Washington 98012 - (425) 775-1311

April 19, 2002

Department of Ecology
Northwest Regional Office
Attention: Lucy McInerney
3190 160th Avenue SE
Bellevue, WA 98008-5452

Subject: **Washington Department of Fish and Wildlife Comments - Draft Supplemental Environmental Impact Statement and Draft Supplemental Feasibility Study - Whatcom Waterway, Tributary to Bellingham Bay, WRIA 01.MARI**

Dear Mrs. McInerney:

The Washington Department of Fish and Wildlife (WDFW) has reviewed the above referenced Draft Supplemental Environmental Impact Statement and Draft Supplemental Feasibility Study and offer the following comments for you consideration. WDFW may submit additional comments in the future as review of the Draft Supplemental Environmental Impact Statement and Draft Supplemental Feasibility Study progresses.

Concerns and Issues::

1. Given the distance between the south Bellingham contaminated sites and the proposed ASB disposal site, is it feasible to use a hydraulic dredge to remove the contaminated sediments from these sites and safely convey the sediment/slurry to the ASB site? 1

2. The remedial design phase will need to confirm that the ASB facility is designed to ensure the long term stability of the facility and that the ASB facility will withstand the effects of potential future seismic challenges. 2

3. The proposed sediment caps will need to be designed to ensure that the integrity of the cap will not be compromised through bioturbation from benthic organisms. 3

4. The proposed sediment caps will need to be designed to ensure that benthic organisms are not exposed to contaminated sediments. 4

5. The cap designs in the vicinity of the ASB/I&J Waterway and in the vicinity of the Cornwall Avenue Landfill should attempt to incorporate bed elevations and substrate materials that will facilitate the opportunity for eelgrass (Zostera marina) to be restored and enhanced in those areas. 5

Positive Attributes of the Modified Preferred Remedial Action Alternative:

1. The Modified Preferred Remedial Action Alternative retains the potential for up to 400,000 cubic yards of contaminated sediments to be available for treatment in the event that a treatment technology can be identified.

2. The Modified Preferred Remedial Action Alternative reduces the area of subtidal habitat that will be disturbed from 180 acres to 163 acres.

3. The Modified Preferred Remedial Action Alternative reduces the area of subtidal habitat that will be converted to intertidal/shallow subtidal habitat from 41 acres to 10 acres.

WDFW's Position:

WDFW prefers that contaminated sediments be disposed at upland facilities where the following criteria can be satisfied:

a. It can be demonstrated that the upland disposal site is stable and will remain stable when challenged by future seismic events.

b. It can be demonstrated that potential re-contamination pathways at the upland disposal site can be minimized and effectively managed.

c. It can be demonstrated that the potential re-contamination pathways associated with the conveyance of the contaminated sediments to the upland disposal site can be minimized and effectively managed.

Given the current level of analysis for the proposed ASB disposal site, it appears that the proposed ASB disposal site meets these criteria. Therefore, WDFW prefers the proposed Modified Preferred Remedial Action Alternative and supports moving forward with the remedial design phase for this alternative.

If you have any questions, please contact me at (360) 466-4345, extension 250.

Sincerely,

Brian Williams

Brian Williams
Area Habitat Biologist

cc:
Bob Everitt - WDFW

Response to Mr. Brian Williams (Washington State Fish and Wildlife)

1) If the selected remedial alternative for the south Bellingham sites includes dredging, hydraulic dredging will be further evaluated for potential use. Hydraulic dredging may be feasible over considerable distance, however, evaluation of cost effectiveness and practicality will be done as the ***cleanup action plan*** and ***engineering design report*** are developed.

2) If the ASB is selected as the alternative, the design phase will include evaluation of seismic stability under specified temporal/magnitude scenarios.

3) Comment noted.

4) Comment noted.

5) Comment noted.